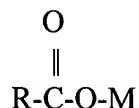


WHAT IS CLAIMED IS:

1. A method of preparing a plant nutrient in the form of a granular metal carboxylate (sucrate) having the molecular formula:



wherein R is a saccharide derived from a beet sugar extract and M is a nutrient cation from a metal oxide and comprising the steps of:

- providing finely divided particles of the plant nutrient,
 - preparing a mix of the plant nutrient with lime and clay,
 - providing a concentrated aqueous solution of beet sugar extract,
 - spraying the aqueous solution of beet sugar extract onto the mix of lime, clay and plant nutrient to form a mixture,
 - introducing the mixture into a compactor where the aqueous solution of beet sugar extract, lime, clay and plant nutrient are heated due to friction of compaction and the beet sugar extract reacts with the plant nutrient,
 - milling the output from the compactor to particles and screening to a desired particle range.
2. The method of claim 1, wherein the plant nutrient is an oxide of iron.
3. The method of claim 1, wherein the plant nutrient is an oxide of zinc.
4. The method of claim 1, wherein the plant nutrient is an oxide of magnesium.
5. The method of claim 1, wherein the plant nutrient is an oxide of manganese.

6. The method of claim 1, wherein the plant nutrient is an oxide of calcium.
7. The method of claim 1, wherein the beet sugar extract is a byproduct of the fermentation industry.
8. The method of claim 1, wherein the plant nutrient may have a range of purity, the purity of the plant nutrient determining the relative amount of lime, clay and solution of beet sugar extract in the composition, the solution of beet sugar extract being a minimum of 5% by weight.
9. The method of claim 1, wherein the temperature of the mixture in the compactor is approximately 170°F.
10. The method of claim 1, wherein the pressure in the mixture in the compactor is approximately 100 tons.
11. The method of claim 1, wherein the compactor is a roll press.
12. The method of claim 1, wherein the mixture of lime, clay, metallic plant nutrient and solution of beet sugar extract are directed into a vertical deaerating feed screw before being introduced into the compactor.
13. The method of claim 1, further comprising the milled product being sprayed with a wax to coat the screened particles thereby assuring a free-flowing, non-caking, dust free product.
14. The method of claim 1, wherein the output of the screening are particles in the range of minus 5 plus 20 mesh (4mm to 0.85mm).
15. A plant nutrient prepared by the method of claim 1.
16. A method of preparing a plant nutrient comprising the steps of:

mixing a metallic oxide with lime and spraying the mix with a concentrated aqueous saccharide solution,

introducing the metallic oxide, lime and concentrated aqueous saccharide solution into a compactor to be heated by the friction of compaction,

milling the compacted material and screening to a desired particle range.

17. The method of claim 16, wherein clay is mixed with the metallic oxide and the lime prior to spraying with the concentrated aqueous saccharide solution.

18. The method of claim 16, further comprising the milled and screened product being sprayed with a wax.

19. The plant nutrient prepared by the method of claim 16.

20. A plant nutrient comprising metal oxide, lime, clay and a sugar solution compressed at elevated temperature and milled to form particles having a desired particle range, each particle being coated with a wax.

21. The plant nutrient of claim 20, wherein the metal oxide is selected from the group consisting of iron, zinc, manganese, magnesium, calcium and mixtures thereof.

22. The plant nutrient of claim 20, wherein the sugar solution is present at a minimum of 5% by weight.

23. The plant nutrient of claim 20, wherein the sugar solution is a byproduct of fermentation of beet sugar.

24. The plant nutrient of claim 20, wherein the sugar solution is 17 - 20% sugar.

25. The plant nutrient of claim 20, wherein the sugar solution has a minimum dry matter content of 65%.